Injectable Vaccine Administration for Adults Aged 19 Years and Older¹

Vaccine	Age/Reminders	Route ²	Contraindications ³
Tetanus, diphtheria, pertussis (Tdap) ⁴ ; Tetanus, diphtheria (Td)	1 dose Tdap for all ages, including those aged 65 years & older; boost with Td or Tdap every 10 years after completion of a primary tetanus-diphtheria series; 1 dose Tdap during each pregnancy, preferred during early part of gestational weeks 27 through 36	IM	Anaphylactic reaction to prior dose or component (Td & Tdap); encephalopathy without other cause within 7 days of a pertussis-containing vaccine (Tdap only)
Hepatitis B (HepB)	Use pediatric formulation for persons aged 19 years & younger when indicated; use adult formulation for persons aged 20 years & older when indicated; Heplisav-B [®] is approved only for persons aged 18 years and older as a 2-dose series separated by 1 month	IM*	Anaphylactic reaction to prior dose or component; hypersensitivity to yeast
Hepatitis A (HepA)	Give 2 doses when indicated; doses must be at least 6 months apart; use adult formulation for 19 years & older	IM	Anaphylactic reaction to prior dose or component
Measles, Mumps, Rubella (MMR)	Give 1 dose if born in 1957 or later; give 2 doses at least 4 weeks apart to adults at high risk	SC	Anaphylactic reaction to prior dose or component; pregnancy; immune suppression; family history of altered immunocompetence ⁵
Varicella (Var)	Give 2 doses at least 4 weeks apart to adults without evidence of immunity (e.g., born in U.S. before 1980, healthcare provider verification of disease)	SC	Anaphylactic reaction to prior dose or component; pregnancy; immune suppression; family history of altered immunocompetence ⁵
Inactivated Influenza ⁶	Give 1 dose every flu season (July 1st through June 30th)	IM*	Anaphylactic reaction to prior dose or component
Pneumococcal Conjugate (PCV13) ⁷	Ages 19 years & older if previously unvaccinated may need 1 dose based on risk condition; based on shared clinical decision making may administer 1 dose to persons 65 years & older who are not at high risk and have not received a dose previously ⁷	IM	Anaphylactic reaction to prior dose or component (including yeast) or any diphtheria toxoid-containing vaccine
Pneumococcal Polysaccharide (PPSV23) ⁷	Ages 65 years & older give 1 dose; ages 2-64 years may need 1-2 doses based on risk condition; minimum interval between doses is 5 years for all ages	IM or SC	Anaphylactic reaction to prior dose or component
Meningococcal Conjugate (MenACWY) ⁸	Ages 2 months-55 years when indicated; may be given to ages 56 years & older; not routinely recommended for persons aged 21 years & older without a risk condition	IM	Anaphylactic reaction to prior dose or component
Meningococcal B (MenB) ⁹	Ages 10 years & older when indicated ⁹ ; based on shared clinical decision making, may administer to ages 16-23 years (preferred 16-18 years)	IM	Anaphylactic reaction to prior dose or component
Human Papillomavirus (9vHPV)	2- or 3-dose series depending on person's health status and age when the HPV vaccine series was started; catch up males & females through age 26 years; based on shared clinical decision making may administer to persons aged 27-45 years	IM*	Anaphylactic reaction to prior dose or component (including yeast); not recommended for use in pregnancy

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Vaccine	Age/Reminders	Route ²	Contraindications ³
Recombinant Zoster Vaccine (RZV, Shingrix)	Preferred zoster vaccine for adults aged 50 years and older; give 2 doses 2-6 months apart	IM	Anaphylactic reaction to prior dose or component
Zoster Vaccine Live (ZVL, Zostavax®)	Adults age 60 years & older, give 1 dose	SC	Anaphylactic reaction to prior dose or component; pregnancy; immune suppression

Route ²	Site	Needle length/gauge	
IM = Intramuscular	Deltoid (preferred) or anterolateral thigh	1-1.5 inches, 22-25 gauge	
SC = Subcutaneous	Fatty tissue over triceps or fatty tissue over anterolateral thigh	5/8 inch, 23-25 gauge	

^{*}Certain vaccines given by the wrong route should not be counted as valid and should be repeated: hepatitis B, inactivated influenza, and HPV. There is no minimum interval between the invalid (e.g., subcutaneous) dose and the repeat dose.

¹For information on travel vaccines, refer to <u>CDC Travel Vaccines</u> (URL: <u>wwwnc.cdc.gov/travel</u>). For more information on vaccines for adults, including *Haemophilus influenzae* type b (Hib), refer to the recommended adult immunization schedule at <u>CDC Vaccines & Immunizations</u> (URL: <u>www.cdc.gov/vaccines</u>). For vaccine-specific recommendations refer to the <u>Advisory Committee on Immunization Practices</u> (ACIP) <u>Vaccine Recommendations and Guidelines</u> (URL: www.cdc.gov/vaccines/hcp/acip-recs/index.html).

²Professional judgment is appropriate when selecting site, needle length, and needle gauge for use in adults. Vaccines should never be administered in the buttocks. Refer to "Giving All the Doses" (by age group) at Alliance for Immunization in Michigan (AIM) (URL: www.aimtoolkit.org).

³See package inserts for complete component listing (by brand). Refer to <u>ACIP General Best Practice Guidelines for Immunization</u> (URL: www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html), and the Pink Book (URL: www.cdc.gov/vaccines/pubs/pinkbook/index.html) for a comprehensive list of vaccine contraindications and precautions.

⁴Tdap licensure ages: Boostrix® (GSK) ages 10 years and older; Adacel® (Sanofi) for ages 10-64 years. Either brand may be used for children aged 7-10 years; for persons 65 years & older, Boostrix® is preferred, but if unavailable Adacel® may be used.

⁵Family history of congenital or hereditary immunodeficiency in first-degree relatives (e.g., parents and siblings), unless the immune competence of the potential vaccine recipient has been substantiated clinically or verified by a laboratory, is a contraindication to receipt of MMR and varicella vaccines.

⁶Age indications for influenza vaccines vary by brand. For more information on flu vaccines, refer to the package inserts, <u>CDC Influenza</u> (URL: <u>www.michigan.gov/flu</u>), or <u>MDHHS Influenza</u> (URL: <u>www.michigan.gov/flu</u>) (Current Flu Season Vaccination Materials for Health Care Professionals).

⁷PCV13 should be administered prior to PPSV23. For further guidance, refer to <u>ACIP Adult Pneumococcal Vaccine Recommendations</u> (URL: www.cdc.gov/mmwr/volumes/68/wr/mm6846a5.htm).

⁸MenACWY licensure ages: Menveo® (GSK) ages 2 months-55 years; Menactra® (Sanofi Pasteur) ages 9 months-55 years. The use of these vaccines in people aged 56 years and older is off-label but is recommended by ACIP. For more information, refer to <u>ACIP Meningococcal Vaccine Recommendations</u> (URL: www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/mening.html).

⁹Booster doses of MenB may be indicated. For more information, refer to the notes section of the <u>CDC Adult Immunization Schedule</u> (URL: www.cdc.gov/vaccines/schedules/hcp/imz/adult.html) under Meningococcal vaccination then special situations for MenB.